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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,104	12/02/2003	Klaus Eschenroeder	13913-120001 / 2003P00250	4399
32864	7590	05/22/2008		
FISH & RICHARDSON, P.C.				
PO BOX 1022				
MINNEAPOLIS, MN 55440-1022				
EXAMINER				
CAO, DIEM K				
ART UNIT		PAPER NUMBER		
2194				
MAIL DATE		DELIVERY MODE		
05/22/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/727,104

Applicant(s)

ESCHENROEDER ET AL.

Examiner

DIEM K. CAO

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-22 are pending. Applicant has amended claims 1, 3, 8-10, 14, 15, 17-19, 21 and 22.

Claim Objections

2. Claims 1-13, 18 and 19-21 are objected to because of the following informalities:

Claim 1 recites "having been collected by an agent corresponding process" in lines 8-12, however, for other similar claims, "an agent" is used to collect the process data items, not "an agent corresponding process".

Claim 10 recites "collecting a plurality of process data items associated with a component of a plurality of components operating in a distributed computer system", however, the specification and other similar claims seem to disclose "collecting a plurality of process data items associated with a plurality of components operating in a distributed computer system", not a single component.

Claim 18 suffer the same problem as claim 10 above.

Claim 19 is an apparatus claim, however, "means for" is not used in the "comparing in accordance ... common application data" limitation.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Bendiksen et al (U.S. 2006/0085798 A1).

As to claim 1, Bendiksen teaches a computer program product, tangibly embodied in a machine-readable storage device, the computer program product comprising instructions operable to cause data processing apparatus to perform operations comprising (page 1, paragraph 2):

receiving a plurality of process data items associated with a plurality of components operating in a distributed computer system (the analyzer 10 collects events originated from one or more particular sensors 14; page 5, paragraph 78 and page 3, paragraph 47), each process data item comprising application data and having been collected by an agent (the sensor generates the event, function call parameters to be sent; page 3, paragraphs 53-55 and page 5, paragraphs 82-85);

comparing in accordance with a plurality of predefined rules each received process data item with one or more other received process data items to identify common application data (at step 610, the analyzer 10 ... for a next potential matching event; page 6, paragraph 86-91);

grouping into a first group a plurality of process data items having common application data (Assuming that the UserIdentifier ... the next potential matching event; page 6, paragraph

92 and the processes that he analyzer 10 users to group event ... and/or host; page 7, paragraph 107);

discovering a first process instance associated with the first group of process data items (at step 910, the user specifies an event(c) of interest ...for analysis; pages 7-8, paragraph 111), the first process instance being a single execution of a sequence of related steps carried out in the distributed computer system (units of work, transaction; page 7, paragraphs 107-110 and process the mortgage requests, credit check application, tax assessment application, etc; page 8, paragraph 114); and

generating a reconstruction of the first process instance based on the process data items in the first group (At this time the list of events that make up the UOW can be displayed to the user for analysis; page 8, paragraph 111 and Another view is referred to as dynamic transaction visualization, where transactions are shown; page 9, paragraphs 122-123).

As to claim 2, Bendiksen teaches modeling a process based on the reconstruction of the first process instance (The graphical presentation ... of transaction problems; page 9, paragraphs 122-123).

As to claim 3, Bendiksen teaches monitoring the first process instance based on the process data items in the first group (At this time the list of events that make up the UOW can be displayed to the user for analysis; page 8, paragraph 111 and In some cases the amount of

captured data may be make dynamic, e.g., as a function of the current environment or operating state of the system/processor being monitored; page 3, paragraph 56).

As to claim 4, Bendiksen teaches wherein the process data items are collected by the agent upon the occurrence of a predetermined condition (these rules determine the conditions which trigger event generation/reporting, as well as amount of information to be collected, the sensor 14 determines if any of the existing filter rules match the current program state ... generate the event; page 3, paragraphs 53-54), and wherein monitoring the first process instance comprises modifying the predetermined condition (The amount of information ... rule specification; page 3, paragraph 55, and In some cases the amount of captured data may be make dynamic, e.g., as a function of the current environment or operating state of the system/processor being monitored; page 3, paragraph 56).

As to claim 5, Bendiksen teaches wherein the process data items have a first type (standard or technology neutral event information 318; page 4, paragraph 60), and wherein monitoring the first process instance further comprises specifying a second type of process data item for the agent to collect (technology specific event information 320; page 4, paragraphs 60-61).

As to claim 6, Bendiksen teaches wherein the agent is associated with a first tracking point (an application makes a function call belonging to the set of functions monitored by the

associated sensor 14; page 3, paragraph 52), and wherein monitoring the first process instance further comprises specifying a second tracking point with which to associated the agent (It is also possible to repeat steps ... the stand API call returns control to the sensor 14, in order to generate an event representing the post-call state; page 3, paragraph 57).

As to claim 7, Bendiksen teaches wherein the agent is associated with a first tracking point (an application makes a function call belonging to the set of functions monitored by the associated sensor 14; page 3, paragraph 52), and wherein monitoring the first process instance further comprises specifying a second tracking point with which to associate a second agent (and the server receiving the message will similarly do so within a second local transaction; page 7, paragraphs 107 and 110).

As to claim 8, Bendiksen teaches wherein the operations further comprise discovering a second process instance based on a plurality of process data items grouped in a second group (at step 910, the user specifies an event(e) of interest ...for analysis; pages 7-8, paragraph 111), and wherein modeling the process is further based on a reconstruction of the second process instance (The graphical presentation ... of transaction problems; page 9, paragraphs 122-123). It is notes that Bendiksen teaches the agents keep collecting events, and the analyzing/monitor process occurs during the life of the software/application.

As to claim 9, Bendiksen teaches wherein the operations further comprises:

receiving a plurality of additional process data items associated with a plurality of components operating in the distributed computer system, each additional process data item comprising application data and having been collected by a second agent (the analyzer 10 collects events originated from one or more particular sensors 14; page 5, paragraph 78 and page 3, paragraph 47, the sensor generates the event, function call parameters to be sent; page 3, paragraphs 53-55 and page 5, paragraphs 82-85),

comparing in accordance with the plurality of predefined rules each received additional process data item with one or more other received process data items to identify common application data (at step 610, the analyzer 10 ... for a next potential matching event; page 6, paragraph 86-91);

grouping into the first group a plurality of the received additional process data items that have common application data with the process data items from the first group (Assuming that the UserIdentifier ... the next potential matching event; page 6, paragraph 92 and the processes that the analyzer 10 users to group event ... and/or host; page 7, paragraph 107).

As to claim 10, Bendiksen teaches a computer product, tangibly embodied in a machine-readable storage device, the computer program product comprising instructions operable to cause data processing apparatus to perform operations comprising (page 1, paragraph 2):

receiving a specification of a predetermined condition (each configuration message ... rules ... event data package; page 3, paragraphs 53 and 55),

upon the occurrence of the predetermined condition (the sensor 14 determines ... if there is a matching event; page 3, paragraph 54), collecting a plurality of process data items associated

with a component of a plurality of components operating in a distributed computer system (the sensor 14 generates the event, thereby capturing the state of the triggering function call; page 3, paragraphs 54 and 47), each process data item comprising application data (The amount of information ... be captured and save; page 3, paragraph 55 and pages 5-6, paragraphs 82-85); and transferring the process data items to a central system (The sensor 14 ... with the analyzer 12; page 3, paragraph 51) operable to discover (at step 910, the user specifies an event(e) of interest ...for analysis; pages 7-8, paragraph 111) and reconstruct a process instance based on common application data found in the process data items (At this time the list of events that make up the UOW can be displayed to the user for analysis; page 8, paragraph 111 and Another view is referred to as dynamic transaction visualization, where transactions are shown; page 9, paragraphs 122-123), the process instance being a single execution of a sequence of related steps carried out in the distributed computer system (units of work, transaction; page 7, paragraphs 107-110 and process the mortgage requests, credit check application, tax assessment application, etc; page 8, paragraph 114).

As to claim 11, Bendiksen teaches wherein the operating of collecting the process data items occurs without modifying the component (this process is conducted in a non-intrusive manner and does not require any additional recompilation or relinking of the user application; page 3, paragraph 48).

As to claim 12, Bendiksen teaches receiving a specification of a second predetermined condition (This management function ... messages, removing expired messages, and retrieving

newly arrived messages, each configuration message contains a set of data collection filter rules; page 3, paragraph 53), and upon the occurrence of the second predetermined condition, collecting additional process data items associated with the component (the sensor 14 determines .. generates the event; page 3, paragraphs 54-55).

As to claim 13, Bendiksen teaches receiving a specification of a second component (inherent from multiple applications in a business process, each has its own local transaction/event collected by associated agent; page 8, paragraph 114 and page 9, paragraph 119 and This management function ... messages, removing expired messages, and retrieving newly arrived messages, each configuration message contains a set of data collection filter rules; page 3, paragraph 53), upon the occurrence of another predetermined condition, collecting other process data items associated with the second component, and transferring the other process data items to the central system (the sensor 14 determines .. generates the event; page 3, paragraphs 54-55).

As to claim 14, see rejection of claim 1 above. Bendiksen further teaches transferring the process data items from the agent to a central system (The sensor 14 ... with the analyzer 12; page 3, paragraph 51).

As to claim 15, it is the same as product claim of claim 1 except this is a method claim, and is rejected under the same ground of rejection.

As to claims 16-17, see rejections of claims 2-3 above.

As to claim 18, it is the same as product claim of claim 10 except this is a method claim, and is rejected under the same ground of rejection.

As to claim 19, it is the same as product claim of claim 1 except this is an apparatus claim, and is rejected under the same ground of rejection.

As to claims 20-21, see rejections of claims 2-3 above.

As to claim 22, it is the same as product claim of claim 10 except this is system claim, and is rejected under the same ground of rejection.

Response to Arguments

5. Applicant's arguments filed 2/15/2008 have been fully considered but they are not persuasive. Claims have been amended to add new limitations and are taught by Bendiksen as set forth in the rejection above.

In the remarks, Applicant argued in substance that (1) in Bendiksen, the transactions pre-exist and are identified in the captured events, i.e., Bendiksen does not teach discovering a first process instance, (2) in Bendiksen, the information is not application data, and (3) Bendiksen does not teach "the process data items collected by a single agent are sufficient for the central system to discover and reconstruct a process instance".

Examiner respectfully disagrees with the arguments:

- As to the point (1), Bendiksen teaches the events stored for method path relation exists only after processing of the analysis process (see rejection of claim 1), and to reconstruction a process, user has to identify a first interest event, then identify related events, thus, the process instance is discovered.

- As to the point (2), Bendiksen teaches the information is customized by the application itself (pages 5-6, paragraphs 82-85), thus, it is application data. Furthermore, in the step of relationship considered by the analyzer, source and destination of the message (function calls) are generated by the application, thus, they are application data (page 4, paragraph 62).

- As to the point (3), claim 10 does not mention "agent" at all, and thus, the arguments are not persuasive. Moreover, if Applicant decides to amend the claim to reflect the above subject matter, examiner would like to know where in the specification, the subject matter is supported.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEM K. CAO whose telephone number is (571)272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

DC
May 14, 2008